

**CORDLESS TELEPHONE-TO-SOUND CARD INTERFACE ADAPTER
HAVING A HYBRID TRANSFORMER CIRCUIT**

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ABSTRACT

A cordless telephone-to-sound card interface adapter provides a connection between any standard cordless telephone system and a sound card of a computer for PC-to-PC or PC-to-telephone voice communications over the Internet. The interface adapter includes a hybrid transformer circuit for interfacing a two-wire circuit of the cordless telephone and a
10 four-wire circuit of the computer sound card. This hybrid transformer circuit cancels out the voice echo that would otherwise exist due to mismatched impedances between the two media and/or from leakage of the signal being transmitted and received on the same pair of telephone lines. A Universal Serial Bus (USB) plug may be provided to receive a bias voltage from the PC for biasing circuits of the cordless telephone system through the
15 interface adapter. Advantageously, the preferred interface adapter utilizes 100% passive components for a low-cost yet effective means to provide mobility for an end user during voice communications over the Internet.